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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,615	09/18/2003	Anatoly Z. Rosenflanz	58354US002	9899
32692	7590	06/21/2006		
3M INNOVATIVE PROPERTIES COMPANY				EXAMINER
PO BOX 33427				MARCHESCI, MICHAEL A
ST. PAUL, MN 55133-3427				ART UNIT
				PAPER NUMBER
				1755

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/666,615	ROSENFLANZ, ANATOLY Z.
	Examiner Michael A. Marcheschi	Art Unit 1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 April 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5,7,9,10,12-34,36,38,39 and 41-61 is/are rejected.
- 7) Claim(s) 6, 8, 11, 35, 37 and 40 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 September 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/13/06.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

After further review of Rosenflanz et al., the previous rejections based on the use of either tantalum oxide or niobium oxide in the broad composition of the reference are withdrawn because it is apparent that the only recitation of these oxides is in the examples defined and one would not envision the broad composition containing these oxides (from only the description of the examples), as defined in the previous office action. However, the formation of these examples into a glass ceramic, as outlined in the previous office action is still obvious for the reasons defined.

Claims 30-34, 36, 38, 39 and 41-55 are rejected under 35 U.S.C. 103(a) as obvious over Rosenflanz et al. 2003/0126804 (the U.S. patent is related to WO reference (X reference) cited on search report filed 1/20/05) for the same reasons set forth in the previous office action which are incorporated herein by reference.

New claims 56-59 are rejected under 35 U.S.C. 103(a) as obvious over Rosenflanz et al. 2003/0126804. The examples (14 and 15) teach a material that comprises all of the claimed components in the claimed amount. With respect to the conversion into a glass ceramic, this is obvious for the same reasons that are defined in the previous office action which are incorporated herein by reference.

Claims 1-5, 7, 9, 10, 12, 13, 14 and 19-26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over MacDowell et al.

(3,635,739) for the same reasons set forth in the previous office action which are incorporated herein by reference. The rejection of claim 10 was inadvertently left out of the previous office action. The reference clearly teaches one of the claimed materials.

Claims 15-18, 27-29, 30-34, 36, 38, 39, 41-55 and new claims 60-61 are rejected under 35 U.S.C. 103(a) as obvious over MacDowell et al. (3,635,739) in view of Rosenflanz et al. 2003/0126804.

The characterization of MacDowell et al. (3,635,739) is defined in the previous office action. Although this reference does not teach manufacturing the glass-ceramic into abrasive particles, this concept would have been obvious motivated by the fact that the secondary reference teaches that glass-ceramics based on alumina (substantially absent silica) are known to be graded to provide glass-ceramic abrasive particles.

Applicant's arguments filed 4/13/06 have been fully considered but they are not persuasive.

Applicants argue that McDowell fails to disclose claims 1 and 23, as amended. The examiner disagrees because the reference teaches an amount of alumina still within the claimed range. During the interview, such an amendment to the alumina content would not be sufficient alone to overcome this reference.

Applicants argue that examples 14 and 15 of Rosenflanz et al. do not disclose converting the material into a glass-ceramic. The examiner acknowledges this, however, as previously defined, although the glass-ceramic aspect is not literally defined for the examples, it is the

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examiners position that this aspect is an obvious limitation and one skilled in the art would have appreciated this because the reference, as a whole, is directed to forming a glass ceramic by melt forming a base material. Applicants have not clearly argued this point. Applicants also states that the results are surprising, however, the reference clearly discloses that the base material has the claimed amount of niobium oxide or tantalum oxide and applicants have not shown evidence as to why this does not meet the claimed material in terms of amounts.

Claims 6, 8, 11, 35, 37 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to teach or suggest a glass-ceramic having the claimed alumina content (claims 6 and 35), the claimed zirconia content (claims 8 and 37) and all of the claimed contents defined in claims 11 and 40.

This action is non final because the examiner inadvertently left of some rejections from the previous office action.

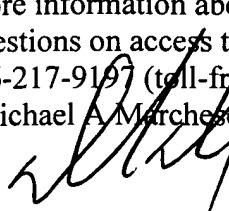
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorendo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MM

Michael A. Marcheschi



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Primary Examiner
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